IN THE CLAIMS

- 1 (Previously Presented). A method comprising:

 establishing a serial physical link;

 providing isochronous support by a software control on the serial physical link; and

 providing a plurality of different channel mapping schemes and enabling the

 selection of one of said schemes.
- 2 (Original). The method of claim 1 further including providing synchronous support by a software control on the serial physical link.
- . 3 (Original). The method of claim 1 further including providing asynchronous support by a software control on the serial physical link.
- 4 (Original). The method of claim 1 further including providing separate logical and physical layers.
- 5 (Original). The method of claim 4 including providing a multiplexer in the physical layer coupled to the logical layer.
- 6 (Original). The method of claim 5 including coupling a baseband processor to said physical layer.
- 7 (Original). The method of claim 5 including coupling an applications processor to said physical layer.

Claim 8 (Canceled).

9 (Previously Presented). The method of claim 1 including providing a channel mapping scheme in which each of a plurality of classes has its own channel and multiplexing logical channels with the same priority in round robin fashion.

- 10 (Previously Presented). The method of claim 1 including dynamically assigning channels on a first come, first served basis.
- 11 (Previously Presented). The method of claim 1 including assigning a plurality of channels to conversational service and providing a plurality of multiplexed channels for other services.
- 12 (Previously Presented). An article comprising a medium storing instructions that enable a processor-based system to:

establish a serial physical link;

provide isochronous support by a software control on the serial physical link; and provide a plurality of different channel mapping schemes and enable the selection of one of said schemes.

13 (Original). The article of claim 12 further storing instructions that enable a processor-based system to provide synchronous support by a software control on the serial physical link.

Claim 14 (Canceled).

- 15 (Previously Presented). The article of claim 12 further storing instructions that enable a processor-based system to provide a channel mapping scheme in which each of a plurality of classes has its own channel and multiplex logical channels with the same priority in round robin fashion.
- 16 (Previously Presented). The article of claim 12 further storing instructions that enable a processor-based system to dynamically assign channels on a first come, first served basis.
- 17 (Previously Presented). The article of claim 12 further storing instructions that enable a processor-based system to assign a plurality of channels to conversational service and provide a plurality of multiplexed channels for other services.

- 18 (Previously Presented). An apparatus comprising:
- a serial physical link to provide isochronous support by a software control on the serial physical link;
 - a logical layer control to interface with said physical link; and
- a control to provide a plurality of different channel mapping schemes and enable the selection of one of said schemes.
- 19 (Original). The apparatus of claim 18 wherein said link provides asynchronous support by a software control on the serial physical link.
- 20 (Original). The apparatus claim 19 wherein said link provides synchronous support by a software control on the serial physical link.
- 21 (Original). The apparatus of claim 19 wherein said physical layer control is coupled to said logical layer control.
- 22 (Original). The apparatus of claim 21 wherein said physical layer control includes a multiplexer coupled to the logical layer control.
- 23 (Original). The apparatus of claim 22 including a baseband processor coupled to said physical layer control.
- 24 (Original). The apparatus of claim 22 including an applications processor coupled to said physical layer control.

Claim 25 (Canceled).

26 (Previously Presented). The apparatus of claim 18 including a control to provide a channel mapping scheme in which each of a plurality of classes has its own channel and to multiplex logical channels with the same priority in round robin fashion.

- The apparatus of claim 18 including a control to dynamically 27 (Previously Presented). assign channels on a first come, first served basis.
- The apparatus of claim 18 including a control to assign a 28 (Previously Presented). plurality of channels to conversational service and to provide a plurality of multiplexed channels for other services.